

The Archer logo consists of the word "ARCHER" in white, uppercase, sans-serif font, followed by a stylized orange and yellow oval shape. The logo is set against a dark teal rectangular background.

ARCHER

# *Archer Exploration Limited*

*Presentation to Eyre Peninsula Mineral & Energy  
Resources Community Development Taskforce*

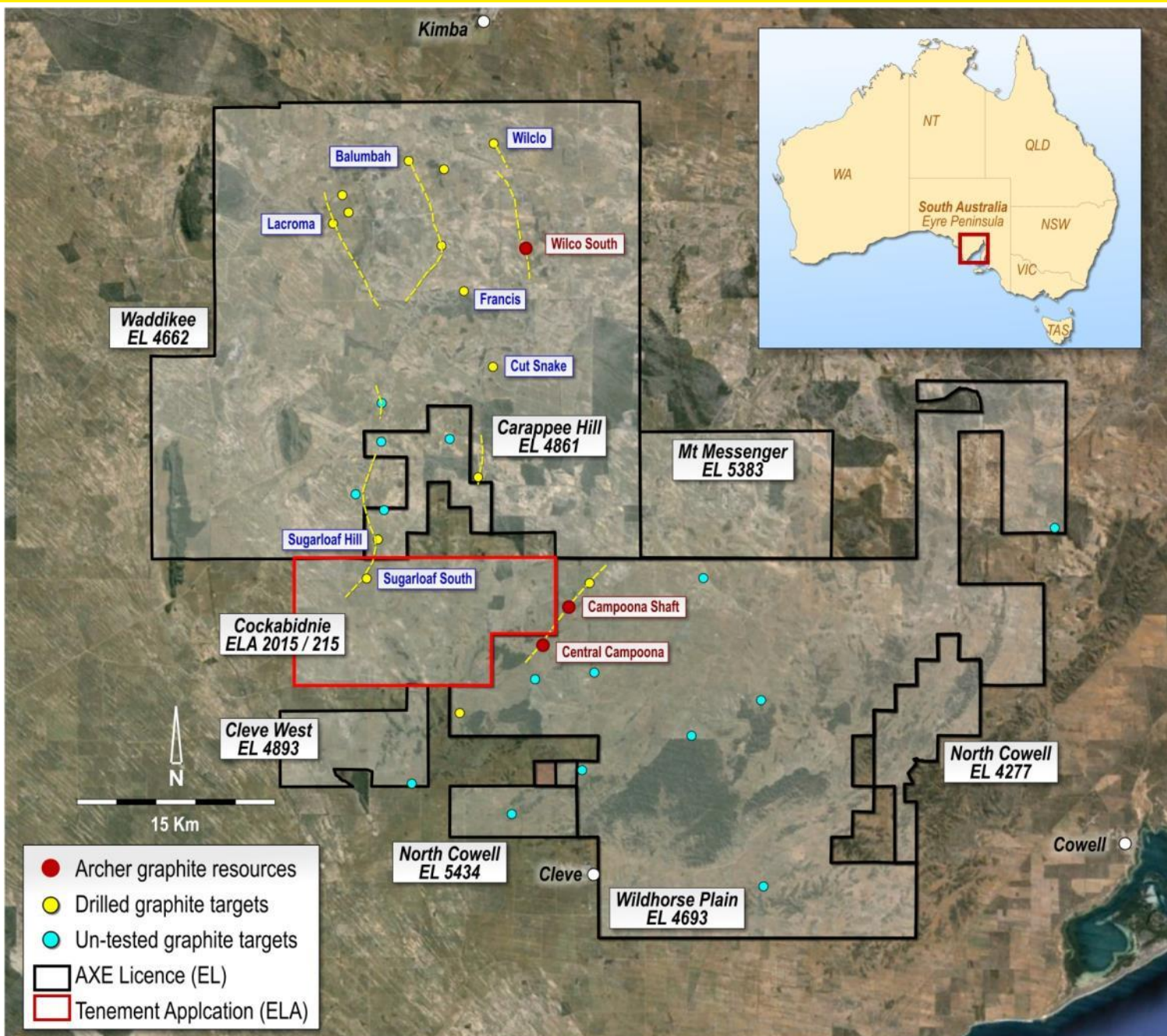
March 2017

Darren Niejalke

Sustainability Manager



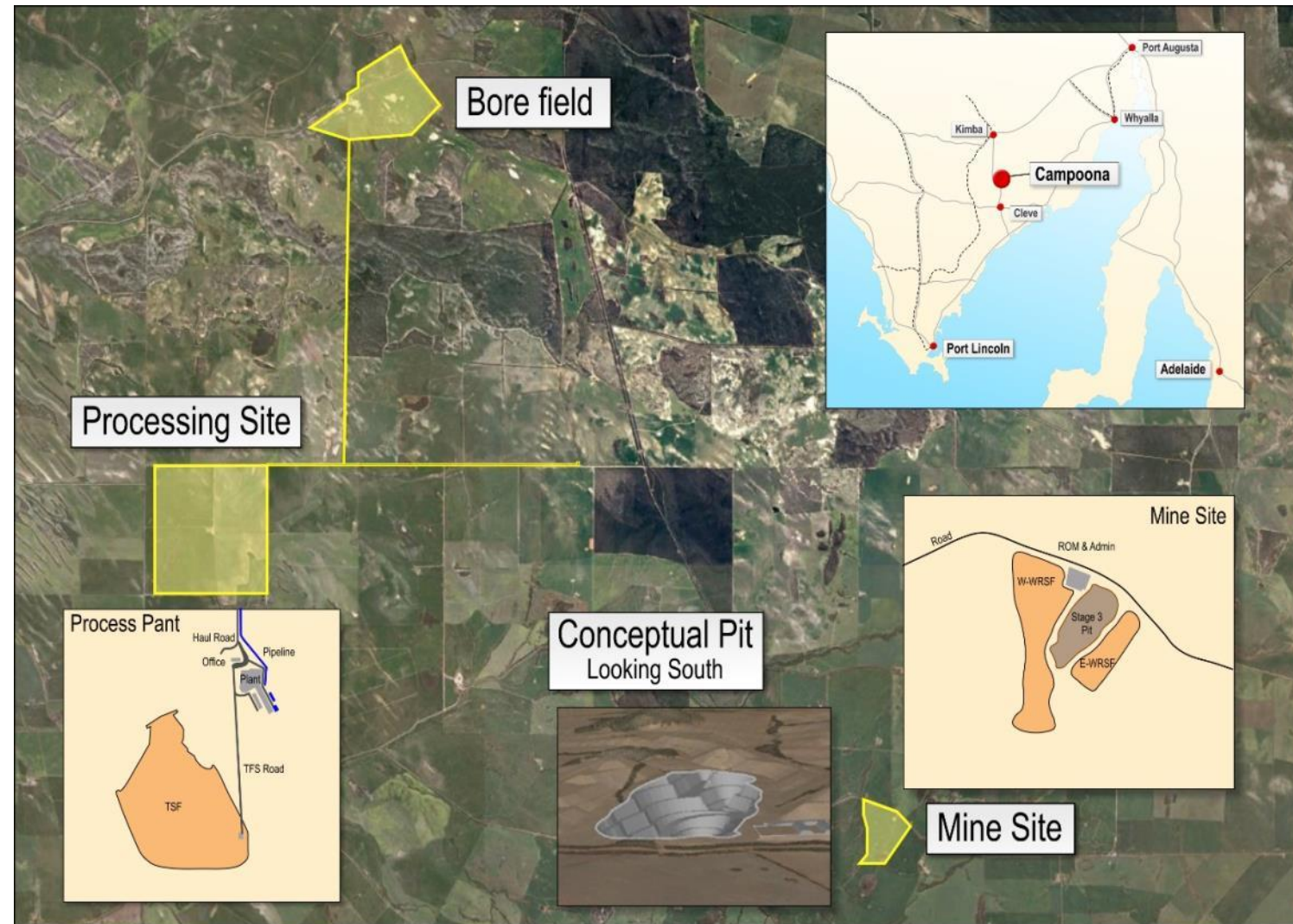




- Campoona Shaft Mine Lease Proposal lodged with DSD
- Graphite suitable for lithium ion batteries and graphene manufacture
- >30 targets
  - 16 drilled
  - 3 resources defined
- Mine Lease Application by Pirie Resources focuses on Campoona Shaft



- Graphite ore will be mined at Campoona Shaft
- Full scale mining and processing of up to 140,000 tpa of graphite ore.
- Ore transported from Campoona Shaft to Sugarloaf in trucks on existing roads.
- Process water sourced from bores (salt water) and SA Water (fresh)
- Mine Life – 16 Years
- Graphite to be trucked to Adelaide for export





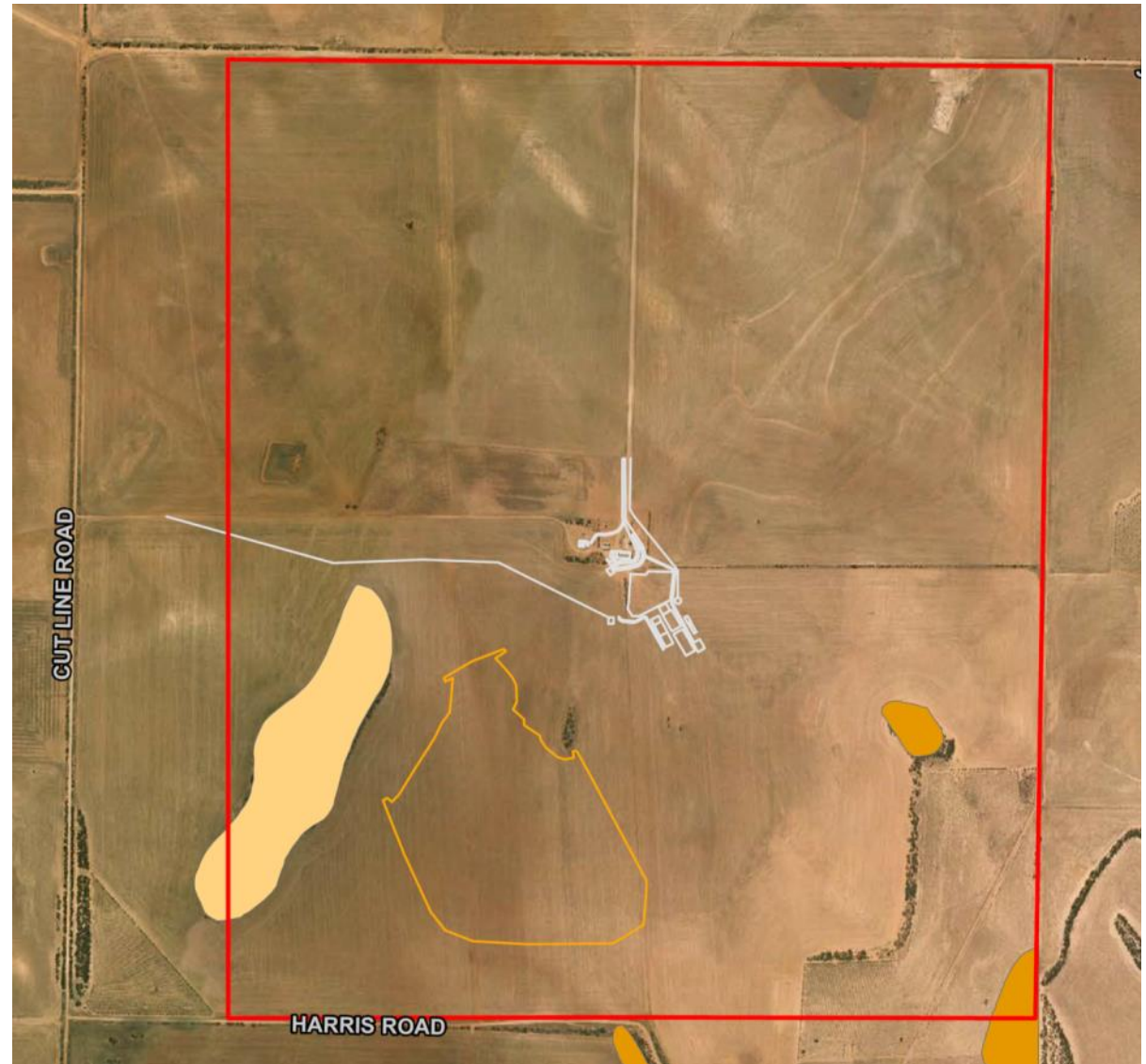
*Conventional, largely free dig open pit mine*

- Compact site  $\approx$  68 Ha
- Conventional open pit mine (not much bigger than a large quarry)
- Total pit depth of 100 metres (largely free dig for first 70m)
- Campaign day-shift only mining (notionally spring and autumn)



*New central processing facility to be built close to existing infrastructure*

- Graphite will be upgraded on site – value adding
- Hydrofluoric (HF) acid will be used to upgrade graphite
- Archer to use 3,500 tpa HF
- HF transported at 49% concentration (3-4 trucks per week).
- HF will be imported (main suppliers are Du Pont and Honeywell)
- HF to be neutralised using lime





Activity	Q4 16	H1 17	H2 17	H1 18	H2 18
Lodge Mining Lease Application		✓			
Grant of Mining Lease					
Prepare and submit applications for all remaining approvals					
Commence construction (subject to approvals)					

	Average per year at full scale	Total life of project
<b>Physicals</b>		
Mine life:		>16 years
Waste mined:	0.5 - 1.1 Mt	8.7 Mt
Graphite ore processed:	140,000 t	1.6 Mt
Graphite produced for sale:	10,000 t	130,000 t
Water consumption:	40-60 ML	
Power consumption:	7,350 MWhr	
Jobs created during construction:	60 FTE	
Jobs created during steady state operation:	30 FTE	
<b>Financials</b>		
Value of graphite produced:	\$33 M	\$430 M
SA Govt royalties:	\$1.2 M	\$14 M
Capital cost of project:		\$36M

**NOTES:**

- Value of Graphite produced assumes a market value of \$3,310 per t and a total of 130,000t is produced over the life of mine
- SA royalties for life of project assumes an average royalty rate of 3.2% (2% for first 5 years and 3.5% there after)
- SA royalties average per year at full scale assumes a royalty rate of 3.5%, graphite production of 10,000tpa and market value of \$3,310 per t
- Capital cost includes project development capital only

The logo for Archer Exploration Limited, featuring the word "ARCHER" in white, uppercase, sans-serif font on a dark teal rectangular background. To the right of the text is a stylized orange and yellow oval shape with a horizontal line through it, resembling an arrowhead or a mineral grain.

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## *Archer Exploration Limited*

ASX code: AXE

Company details: Level 1, 28 Greenhill Road  
Wayville South Australia 5034  
[www.archerexploration.com.au](http://www.archerexploration.com.au)

Further  
information:

Greg English (Chairman)  
T +61 8 8272 3288  
[genglish@archerexploration.com.au](mailto:genglish@archerexploration.com.au)

